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Segercrantz, Beata Ulrica

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A discourse analysis of innovation in academic management literature

Beata Segercrantz, Karl-Erik Sveiby and Karin Berglund

Innovation is in many contemporary economies understood as a key driver of desirable long-term economic and social development (Fagerberg, 2005). The Organisation for Economic Co-operation and Development (OECD) and the European Union (EU) have emphasized in their recent strategies that innovation is essential for the recovery from the global financial crisis that began around 2008. In this vein, scholarly debates of innovation in management studies are almost exclusively occupied with attempts to improve, refine and manage innovation in more economically efficient ways (for example, Cohen and Levinthal, 1990; Chesbrough, 2010; Lee et al., 2012). Kimberly (1981) highlighted already over 35 years ago this tendency to view innovation as fundamentally positive and called it the 'pro-innovation bias'.

Recently, scholars have returned to this tendency and developed a critique by addressing some of the shortcomings in innovation research. These include neglect of the impact of changing meanings of innovation over time (Godin, 2012), the reproduction of gendered orders (Andersson et al., 2012; Alsos et al., 2013), disempowerment of researchers and scientific knowledge (Leitch et al., 2014), blurring of innovation due to its popularity in policy (Perren and Sapsed, 2013), risks of innovation in public services (Brown and Osborne, 2013) and lack of critical analysis (Sveiby et al., 2012). While agreeing with the above, we suggest taking the critique one step further. By focusing on the taken for granted assumptions of innovation in the academic community we attempt to advance the field of critical innovation studies by formulating transformational research questions. The aim of this chapter is to broaden the scope of management literature by analysing and problematizing the academic management discourse of innovation.

We adopt discourse analysis as our methodological approach to study how innovation is regarded in management research of innovation – from management of innovation (for example, how to be more innovative) to innovation in management (for example, administrative innovation). We approach these types of innovation as social constructions 'produced and made real through discourses' and show how innovation 'cannot be fully understood without reference to the discourses that give them [innovation(s)] meaning' (Phillips and Hardy, 2002, p. 3). In contrast to content analysis, discourse analysis provides an opportunity to interrogate the content through a second round of questions. While paying attention to content we also ask: How is innovation constructed as positive? Why is it constructed in this way? What are the implications? We pose these questions from a discursive perspective as discourse analysis is an effective, well-established methodology used in management literature to study how social phenomena are constructed (see, for example, Mabey, 2013), but seldom used to analyse academic discourses (see, exception, Ahl, 2006) or innovation research, and, as far as we know, never before in an analysis of innovation research. Through this analytical exercise we contribute methodologically to critically informed research on innovation.

The chapter is structured as follows. First, we discuss how innovation in academic management literature can be explored as a discursive terrain and describe our methodology. We then conduct an analysis showing how innovation emerges through three discourses: acceleration, self-preservation and faith and discuss the linkages between the three discourses. We show how their interplay may potentially produce a self-reinforcing circle of innovation and end the chapter with some concluding remarks.

14.1 A DISCURSIVE APPROACH TO INNOVATION

Innovation research, as any research in social sciences, produces particular assumptions of the future, business, society, politics, the economy and the individual, all of which influence research questions asked, choice of methods, related theories and findings (Calás et al., 2009). Further, each field of research has foundational texts, which scholars must relate to, whether agreeing or objecting, and which help shape the research field and objectives. The writing and publishing practices of innovation research and its institutional support are hence of relevance since they enable and restrain the conduct of research.

We engage in an analytical exercise around innovation in which discourse plays a central role. Discourse can and has been studied in various ways and on different levels (Phillips and Oswick, 2012). We understand discourse as interconnected and structured collections of texts (for example, written or spoken utterances) and as processes that produce and diffuse these texts (Parker, 1992; Phillips and Hardy, 2002). We view the discursive production of texts as practices that bring objects, such as innovation, into being, but also as practices that deconstruct and/or silence understandings. Innovation is hence not seen as a 'natural observable fact' but as a contingent, historical and contextual social construction that is constantly being produced, reproduced and transformed and as a phenomenon with political (Foucault, 1971) and material effects (Phillips and Oswick, 2012).

Through a discourse analysis we draw attention to the production of discourses of innovation in high impact articles in academic management literature. We analyse what discourses are at play and how these contribute in powerful ways to the meanings ascribed to innovation. We are interested not only in what is done (or not done) with innovation and how innovation is theorized (Gee and Handford, 2012) but also the material effects produced through discourse. This means that we are interested in taken for granted meanings that have been stabilized in this terrain.

14.1.1 Selection of Articles

For reasons of diversity, transparency and availability we used Web of Science (WoS) and its Social Science Citation Index database (SSCI) core collection category 'management', comprising 185 journals at the time of our literature search in October 2015. We chose the 1986–2014 period for both publications and citations. The WoS search yielded 7050 articles with innovat* in the title comprising 173,624 citations. The selection of articles from this list for our discourse analysis was then made in the three following steps:

1. A corpus of text of the 200 most influential articles based on citation counts, generated by the WoS Citation Report was made. Research impact was calculated based on total number of citations per article, normalised citation impact index (NCII) and relative citation rate (RCR).
2. We ranked all articles in the corpus of text based on an unweighted average of the three indicators, then selected the 150 highest ranked articles to represent the dominant academic discourse of innovation in management literature. We excluded literature reviews and articles where innovation was not central. Compensations for the shortfalls were added from the text corpus in ranking order.
3. Finally, we read all 150 abstracts. To select articles for the discourse analysis we first selected the 25 highest ranked articles. We excluded articles aimed at practitioners, then discussed and manually selected articles to achieve a selection that mirrored the topics covered in the abstracts. The final number of articles to analyse was 32 (see Appendix).

The five highest ranked articles in our selection remain the most influential irrespective of ranking method and period. Despite a rapid increase in number, a very small group of articles is also highly influential today; 18 of the articles selected were in 2010–14 still among the 25

highest ranked articles in pure citation count. Although the quality of discourse analyses typically is evaluated with other criteria than validity, we wish to highlight that the texts analyzed remain of relevance today for current scholarly discussions.

14.1.2 Reading the Material

Based on a pilot study, a reading of previous innovation research reviews and the abstract analysis, we developed a set of questions (Ahl, 2006, 2007) and a questionnaire on the articles and distributed the 32 articles among the authors. The questions we asked were:

1. What is the reason behind the problem that the article attempts to solve?
2. How is innovation described?
3. What is innovation compared and contrasted to?
4. What can be innovative?
5. What influences and/or drives innovation?
6. What does innovation lead to?

We explored tentative themes after first reading the articles during a two-day seminar, followed by an analysis where three major themes (drivers, practice and effects) were identified. Segercrantz and Sveiby then did a second reading of all the articles and conducted the discourse analysis with Berglund functioning as reader and critique provider. In this process each of the three themes were linked to a function – drivers to acceleration, practice to self-preservation and effects to faith in innovation. These functions came to signify the discourses we recognized as central in management literature.

14.2 ANALYSIS: DISCURSIVE CONSTRUCTIONS OF INNOVATION IN MANAGEMENT LITERATURE

Our analysis shows that typical theories about innovation tend to emphasize a need to facilitate, enhance and improve innovation or to remove barriers. For example, Amabile (1988, p. 123) examines 'factors influencing creativity and innovation in organizations', Cohen and Levinthal (1990, p. 128) explore how 'the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends is critical to its innovative capabilities', and Chesbrough (2010, p. 354) 'explores the barriers to business model innovation'.

The typical article addresses a gap in extant innovation research, and maintains that specific studies contribute to more/improved innovation (see, for example, Brown and Duguid, 1991; Eisenhardt and Tabrizi, 1995; Tsai, 2001; Cassiman and Veugelers, 2006), better/faster implementation/diffusion of innovation (see, for example, Abrahamson, 1991; Klein and Sorra, 1996), and/or better understanding of how innovation works in unexplored or underexplored contexts (Van de Vrande et al., 2009).

The article then attempts to develop models or similar to drive/manage/control innovation and finally provides prescriptions. These should lead to success for the innovating organization in terms of various benefits such as profit, growth or survival. Further, although a process perspective dominates the discussion, innovation is mainly seen as a product and typically something 'technical' that is to be managed (for example, Henderson and Clark, 1990; Cassiman and Veugelers, 2006). Regardless of the kind of success envisaged, innovation is, at worst, expected to continue and, at best, to multiply. As Teece (2010, p. 186) claims, technological innovation is typically highly valued. This positive understanding of innovation is generally taken for granted and rarely debated (Abrahamson, 1991), even if

there are exceptions highlighting that the scope of innovation research needs to be broadened (Van de Vrande et al., 2009).

Typical theorizing around innovation touch on a variety of different themes, which could be categorized in many ways. Given the evolutionary assumptions inherent in the concept of innovation, the typical article's process perspective and our analysis, we wish to draw attention to how drivers of innovation, practices of innovation and effects of innovation are discussed in management literature. The focus is on discourses of innovation adopted and constructed in academic management literature. It must be emphasized that although we discuss drivers, practices and effects of innovation separately, they are closely related. For analytical reasons we discuss the three discourses separately, before returning to the issue of their interconnectedness at the end of the chapter.

14.2.1 Constructing Drivers of Innovation: Discourse of Acceleration

Anderson et al. (2004, p. 159) argue, 'innovation studies have almost exclusively treated innovation as the dependent variable upon which other "predictor" variables have been regressed'. This is consistent with our analysis. The focus of the articles is on how to increase the innovation rate (Stuart, 2000; Tsai, 2001), how to generate greater research and development (R&D) intensity (Cohen and Levinthal, 1990; Powell et al., 1996; Cassiman and Veugelers, 2006), acceleration of adaptive processes (Damanpour, 1991; Eisenhardt and Tabrizi, 1995), and improvements in the new product success rate (Dougherty, 1992), being open to a process of technology exploitation and exploration to speed up innovation (Van de Vrande et al., 2009) or 'innovation performance' in general (Cassiman and Veugelers, 2006). The articles might be on drivers that 'accelerate growth rates' in sales (Stuart, 2000), or a decision to study an industry that is characterized by a fast rate of technological innovation

(Henderson and Clark, 1990). We therefore find that issues around acceleration dominate in the construction of drivers in the articles.

A wide variety of drivers is proposed in the articles, which can be classified as intra-organizational drivers and extra-organizational drivers; as accelerating innovation or as barriers to the drivers. The only exception is open innovation articles that stand out as they combine the two types of drivers, thus presenting a more complex view of what drives innovation (Van de Vrande et al., 2009; Lee et al., 2012).

Table 14.1 Drivers of innovation

	Citations: Drivers / Acceleration	Citations: Barriers / Deceleration
Intra-organizational drivers	'In this paper we probed fast product innovation and, in so doing, attempted to contribute not only to the product innovation literature but also to the beginning of an outline of fast, adaptive organizational processes and, ultimately, organizational forms that fit with competitive, fast-paced situations.' (Eisenhardt & Tabrizi, 1995, p. 108) 'If their internal communities have a reasonable degree of autonomy and independence from the dominant world view, large organizations might actually accelerate innovation.' (Brown & Duguid, 1991, p. 54)	'Two interpretive schemes are found to inhibit development of technology-market knowledge: departmental thought worlds and organizational product routines. … The potential barriers these interpretive schemes may become need to be dealt with specifically and in depth. This study suggests three intermediary processes which together can help overcome the barriers.' (Dougherty, 1992, p. 179, 195)
Extra-organizational drivers	'The result suggests that high absorptive capacity is associated with a better chance to successfully apply new knowledge toward commercial ends, producing more innovations and better business performance.' (Tsai, 2001, p. 1003) 'Thus, success in innovation will depend not only on combining various innovation activities, but also on creating the right context.' (Cassiman & Veugelers, 2006, p.80)	'A lack of trust between the parties, difficulties in relinquishing control, the complexity of a joint project, and differential ability to learn new skills are all barriers to effective collaboration.' (Powell & al. 1996, p. 117)

As exemplified in Table 14.1, studies conducted from the perspective of intra-organizational drivers describe individual or employee characteristics, such as creativity (Amabile, 1988; Eisenberger et al., 1990), diversity (Bantel and Jackson, 1989), problem-solving (Van de Ven,

1986; Eisenhardt and Tabrizi, 1995; Etzkowitz and Leydesdorff, 2000), affective responses (Agarwal and Prasad, 1998), absorptive capacity (Cohen and Levinthal, 1990), or adaptation (Eisenhardt and Tabrizi, 1995). Organizational or group-level drivers are: types of organizations (Dewar and Dutton, 1986; Damanpour, 1991), leadership, experimentation and effectuation (Chesbrough, 2010), team compositions (Bantel and Jackson, 1989), R&D (Cohen and Levinthal, 1990), ideas (Scott and Bruce, 1994), contextual variables (Cassiman and Veugelers, 2006), technology brokering (Hargadon and Sutton, 1997), institutional procedures (Subramanian and Youndt, 2005), the organization's climate (Klein and Sorra, 1996), knowledge resources (Dewar and Dutton, 1986) and particular interpretive schemes (Dougherty, 1992).

Scholars taking an interest in extra-organizational drivers study how the organization's external environment may accelerate innovation, for example, various networks (Ahuja, 2000) or the position in the network (Tsai, 2001), alliances (Stuart, 2000), competitors, lead users or prominent actors (Stuart, 2000; Laursen and Salter, 2006), suppliers and universities (Laursen and Salter, 2006), competitors and strategies (Henderson and Clarke, 1990), innovation systems (Etzkowitz and Leydesdorff, 2000), internationalization (Hitt et al., 1997), and fads and fashions (Abrahamson, 1991). Innovation is also discussed as a system of institutional drivers as innovation is seen as a topic of national concern (Etzkowitz and Leydesdorff, 2000) and of global interest since it is at the heart of global competition (Bantel and Jackson, 1989).

Recently, studies of open innovation have argued for the need to embrace both intra- and extra-organizational drivers. Here, the complexity of the different drivers is seen to propel innovation in unexpected ways (Van de Vrande et al., 2009) whereby innovation becomes less of a specific practice and more of a universal approach of co-creation and boundary dissolution (Lee et al., 2012).

Although extra-organizational drivers are recognized and innovation is viewed as important for national and global communities, the distinction between the organization and its outer environment dislocates the outer environment. It is acknowledged, but becomes marginalized; positioned in the periphery or is completely absent. When mentioned, the environment is 'scanned' (Dougherty, 1992) from the perspective of the organization only or seen in the role of provider of resources for innovation (Cohen and Levinthal, 1990; Laursen and Salter, 2006), or influencing the firm's innovative or profit-generating capabilities (Teece, 1986; Subramanian and Youndt, 2005). Caution is raised as the environment is 'unclear and changing' and 'dynamic' (Eisenhardt and Tabrizi, 1995), or the outer environment (global world) is seen to benefit from the innovations that are created at the market (Lee et al., 2012).

Van de Ven (1986), however, argues that the innovator needs to scan the environment and to place critical dimensions of the whole environment into the innovating unit. Although he claims that the 'currently more popular, design [of the innovation process] is the customer or need-driven model' (Van de Ven, 1986, p. 599), customers were typically viewed as relatively passive rather than drivers of innovation until the early 2000s, for instance, clients or customers were seen as sources of information for innovation and the organization (Klein and Sorra, 1996; Laursen and Salter, 2006), to be 'tapped' (Cassiman and Veugelers, 2006).

A shift in the literature occurs with the introduction of the concept of open innovation where stakeholder, citizen and employee participation (also non-R&D experts) becomes valuable (for example, Van de Vrande et al., 2009). In this process innovation is opened up in a desire for democratization – to involve different groups in the process of creating the new. Innovation is indeed opened up as a co-creation process seen to be 'universal' for every organization (Lee et al., 2012).

In sum, drivers of innovation dominate in the articles. In fact, all 32 articles discussed either how to drive innovation or how to overcome barriers. With some exaggeration, the

most influential innovation research seems to argue that 'there are (already) innovations, but more innovations are incessantly needed to foster new innovations'. We will return to this self-referential feature later because innovation itself becomes a moving target changing the landscape not only of organizations but also nations and the global community, which, in turn, imposes change on the organization. A discourse of exponential change, acceleration, thus constitutes a central discursive thread in innovation management literature.

14.2.2 Constructing Practices of Innovation: Discourse of Self-preservation

The discourse of acceleration places organizations in situations of risk of failure and disorder. On the one hand, innovation is desired, since it is most important regards the life of the organization. On the other hand, many, if not most, innovations are not commercially successful (Teece, 2010). Our analysis shows that management studies of innovation place strong emphasis on innovation processes as ones that need to be managed, from the generation of ideas (Van de Ven, 1986) to diffusion and adoption (Abrahamson, 1991; Agarwal and Prasad, 1998; Teece, 2010). This is perhaps not surprising, since our analysis focuses on management studies. However, what is of interest here is *how* the articles attempt to manage innovation.

The range of areas requiring management attention is wide in the articles – we list only a fraction here: personal innovativeness (Agarwal and Prasad, 1998) and creativity (Amabile, 1988), structures and networks (Doughert, 1989; Ahuja, 2000), diversity in top management teams (Bantel and Jackson, 1989), working, learning and innovating (Cohen and Levinthal, 1990; Brown and Duguid, 1991), absorptive capacity (Cohen and Levinthal, 1990) or knowledge and human capital (Dewar and Dutton, 1986; Cohen and Levinthal, 1990). Furthermore, various scholars (Chesbrough, 2010; Teece, 2010) argue that it is not enough for

firms to have efficient practices for exploring new ideas; firms must also invest sufficiently in innovating business models through which new innovations pass and generate profit. By drawing attention to specific issues and claiming that these are in need of management, much management literature attempts to measure and produce prescriptions of successful innovation or, in contrast, highlight the more spontaneous or disordered side of innovation, as illustrated in Table 14.2.

Table 14.2 Practices of innovation

Practices	Citations
Controlling and constructing measures and prescriptive models	'We formulate a model of firm investment in research and development (R&D), in which R&D contributes to a firm's absorptive capacity, and test predictions relating a firm's investment in R&D to the knowledge underlying technical change within an industry.' (Cohen & Levinthal, 1990, p. 128)
	'The purpose of this paper is to propose a new constructs that further illuminates the relationships explicit in the technology acceptance models, and to describe an operational measure for this construct that possesses desirable psychometric properties.' (Agarwal & Prasad, 1998, p. 204)
	'Therefore, innovation management requires a tight integration of internal and external knowledge within the firm's innovation process to capture the positive effects each innovative activity has on the marginal return of the other.' (Cassiman & Veugelers, 2006, p.80)
The non-controllable (e.g., creativity)	'Individual creativity is the most crucial element of organizational innovation, but it is not, by itself, sufficient. And features of the organization can be the most crucial determinants of an individual's creativity at any point in time.' (Amabile, 1988, p. 125)
	'They [open source programmers] retain private benefits from their work process such as learning and enjoyment, and they gain benefits associated with community participation as well.' (von Hippel & von Krogh 2003 p. 217).
	'Our findings are that employees' general perception of being valued and cared about by the organization is positively related to … innovation on behalf of the organization in the absence of anticipated direct reward of personal recognition.' (Eisenberger & al., 1990, p. 57)

As demonstrated from the extracts in Table 14.2, most of the studies attempt to construct measures of innovation (for example, Cohen and Levinthal, 1990; Henderson and Clark, 1990; Scott and Bruce, 1994; Klein and Sorra, 1996; Powell et al., 1996; Agarwal and Prasad, 1998; Stuart, 2000; Tsai 2001; Laursen and Salter, 2006), an issue that has been on the research agenda in particular since the influential Charpie report (US Department of Commerce, 1967) and *Oslo Manual* (OECD, 1992 [1997, 2005]) emphasized the need for

measuring innovation. For example, Agarwal and Prasad (1998) propose a construct with the aim of identifying very early adopters who will facilitate further diffusion. Stuart (2000) measures an organization's innovativeness using citations of patents. Cassiman and Veugelers (2006, p. 68) measure 'complementarity' to find instances where 'the marginal return to one activity increases as the intensity of the others increase'.

The studies that measure innovation practices also often produce prescriptive accounts, the 'ideal' and most 'effective' practices to drive. Agarwal and Prasad (1998, p. 214) describe how their findings can be used 'to more effectively guide the availability of information channels'. Cohen and Levinthal (1990, p. 149) claim that their results can be used for the 'prescriptive analysis of organizational policies'. Teece (2010) argues that business models are crucial for how firms organize and commercialize technological achievements to generate profit. He offers suggestions regarding efficient business model characteristics. Moreover, our analysis illustrates how management articles discuss practices of innovation in terms of producing the most desirable outcomes for the innovating firm.

Although issues of control dominate in the construction of innovation practices, innovation is also discursively constructed as a spontaneous problem-solving capability (Eisenberger et al., 1990). The apparently non-controllable (creativity, experimentation, flexibility and spontaneity) is found to generate innovations (for example, Amabile, 1988; Eisenberger et al., 1990; Chesbrough, 2010; Teece, 2010). Thus, there is a dilemma here: measuring and controlling innovation may be counterproductive in the sense that it 'kills' creativity and spontaneity.

Van de Ven (1986, p. 591) crystallizes the tension between control and disorder by arguing that institutional leadership is required in order to 'put the whole into the parts'. Management must 'embrace uncertainty' by 'maintaining balance among innovative subunits' (Van de Ven, 1986, pp. 603–4). In short, to manage innovation is to both control disorder and

embrace it. Some authors claim that their proposed construct does precisely that: absorptive capacity is 'what gives rise to creativity' (Cohen and Levinthal, 1990, p. 130), or 'Good innovation-values' plus 'strong implementation climate' will 'produce skilful and consistent innovation use' (Klein and Sorra, 1996, p. 1065), or 'open source software development […] contains elements of both the [regulated] private investment and the [non-regulated] collective action model and can offer society "the best of both worlds"' (von Hippel and von Krogh, 2003, p. 209).

In sum, the construction of management practices of innovation is dominated by the tension between control and disorder. The articles develop measures and prescribe best practices to manage the tension in order for the innovating organization to grow, innovate more and increase its profit. The focus is hence on the preservation of the organization itself. Also, when the focus is on relations outside the organization, as in open innovation and absorptive capacity, the aim is to improve the benefits for the innovating organization. By restricting itself to organizational self-preservation the discourse pays little or no attention to controlling effects beyond the organization. Thus, the analysis illustrates how the construction of practices is underpinned by a discourse of self-preservation that celebrates self-interest.

14.2.3 Constructing Effects of Innovation: Discourse of Faith

'Few issues are characterized by as much agreement as the role of innovation and entrepreneurship for social and economic development', according to Van de Ven (1986, p. 590). Our analysis confirms this argument: the articles typically take for granted that the role of innovation is always 'good', and hence the effects of innovation are only given marginal attention.

Despite the scant empirical research on the effects of innovation in the literature analysed, there is broad agreement about the benefits for the innovating firm: (1) improved organizational survival and/or competitive advantage; (2) increased economic benefits for the innovating firm; and (3) a faster pace of change and novelty in general (Table 14.3).

Table 14.3 Effects of innovation

Effects	Citations (emphasis added to highlight how effects of innovation are constructed)
Organizational survival or competitiveness	'As the organizational utilization of information technology proliferates, and as technology becomes more critical for **competitive survival**, the importance of the technology acceptance problem escalates; systems that are not accepted by their intended users will not result in any **sought-after benefits**.' (Agarwal & Prasad, 1998, p. 204) 'Business model innovation can itself be a pathway to **competitive advantage** if the model is sufficiently differentiated and hard to replicate for incumbents and new entrants alike.' (Teece, 2010, 173) 'Our entire world is undergoing transformation. In this rapidly changing and often unpredictable environment, innovation is the imperative key factor for organizations to develop **competitiveness** and **succeed** in the market.' (Lee & al., 2012, p. 818)
Economic benefits for the organization	'The first finding is that the **commercial success** of a new product depends on how well the product's design meets customers' needs … The second finding is that collaboration among the technical, marketing, manufacturing, and sales departments contributes to a new **product's success.'** (Dougherty, 1992, p. 179) '… the organization's culture must find ways to embrace the new model, while maintaining the effectiveness of the current business model until the new one is ready to take over completely. Only in this way can business model innovation help companies escape the 'trap' of their earlier business models, and renew **growth** and **profits**.' (Chesbrough, 2010, 362) 'Such innovative suggestions are important to the organization's **growth** and **success.'** (Eisenberger & al., 1990, p. 57)
Faster change and novelty	'The adoption of innovation is generally intended to contribute to the **performance** or **effectiveness** of the adopting organization. Innovation is a means of **changing** an organization ...' (Damanpour, 1991, p. 555) '… organizational units can produce **more innovations** and enjoy better performance if they occupy central network positions.' (Tsai, 2001, p. 996)

Specific examples of the effects of innovation mentioned in the articles are: better organizational performance (Abrahamson, 1991; Damanpour, 1991; Tsai, 2001); innovation and learning (Cohen and Levinthal, 1990) and 'sought after benefits' (Agarwal and Prasad, 1998); higher productivity and competitive performance (Klein and Sorra, 1996; Cassiman

and Veugelers, 2006); higher sales growth (Powell et al., 1996); more profit for the innovating firm (Dougherty, 1992; von Hippel, 1994; Teece, 1986, 2010; Chesbrough, 2010); a higher return on equity and assets (Subramanian and Youndt, 2005); competitive advantage or survival (Amabile, 1988; Henderson and Clarke, 1990; Agarwal and Prasad, 1998; Teece, 2010); growth (Bantel and Jackson, 1989); organizational change (Damanpour, 1991); novel technological processes (Dewar and Dutton, 1986); meeting customer demands and keeping up with customers (van de Vrande et al., 2009); and coming to grips with how to succeed on the market in a world of globalization and transformation (Lee et al., 2012). Some of these effects are empirically demonstrated, but there are several claims made mainly or solely on the basis of faith.

The benefactor of the beneficial effects is always the innovating firm, whereas customer/user benefits and desirable 'non-economic benefits' at the societal level are marginalized. Thus, our analysis leads us to conclude that effects are constructed from faith in the goodness of innovation. Innovation is seen as bringing about desirable effects and the preoccupation with desirable effects contributes to a construction of innovation as necessary and even inevitable. Management research seems to have complete trust and confidence in innovation as a source for desirable effects. The articles are hence dominated, we argue, by a discourse of faith in the goodness of innovation.

To summarize, the analysis of the effects of innovation that emerges from a discourse of faith demonstrates two important issues. The studied or acknowledged effects in management literature focus on the production of desirable effects for the innovating organization; thus, we draw attention to the neglect of other desirable and undesirable effects. The other issue is that the articles assume that the more, faster and better the organization innovates, the more desirable effects for the organization can be expected, which in turn will provide the resources to innovate more – a self-reinforcing effect.

14.3 DISCUSSION: INTERCONNECTING ACCELERATION, SELF-PRESERVATION AND FAITH

In this chapter we have shown that in highly influential management articles the understandings of drivers of innovation are typically constructed through a discourse of acceleration, practices of innovation are constructed by a discourse of self-preservation, and the effects of innovation are created through a discourse of faith. Although we have analysed drivers, practices and effects of innovation separately, they are often discursively tightly intertwined and self-referential in academic discussion. For instance, Cohen and Levinthal's (1990) seminal article epitomizes a self-reinforcing feature. R&D activities add 'absorptive capacity', defined as 'the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends' (Cohen and Levinthal, 1990, p. 128). This capacity is also critical to its innovative capabilities. Since the theory uses R&D intensity as an indicator to operationalize both innovation and absorptive capacity, the same indicator is both driver and effect. In other words, R&D intensity generates innovation and absorptive capacity, while absorptive capacity enhances R&D intensity. What is constructed here is a self-reinforcing circle, driving the organization to accelerate and innovate faster in order to again innovate more and faster. The circle is also constructed as self-referential and restricts the focus to the organization and benefits to it.

It could therefore be argued that the discourse of acceleration promotes self-reinforcing features in order to enable organizations to innovate ever faster. Here, the discourse of self-preservation plays a central role. Its interest is primarily in *how* to accelerate innovation in order to achieve the desired effects, that is, benefits for the organization. No or little attention is given to *what* the effects actually are inside and outside the organization (for

example, undesirable effects on employees or on society at large). It hence reproduces the faith in innovation. In Table 14.4 we show the ways in which drivers, practices and effects of innovation are discursively, dynamically and mutually constituted.

Table 14.4 Academic management disc

Discourses / Themes	Acceleration
Drivers of innovation	Good driver accelerate innovation
Practices of innovation	Effective accelera innovat
Effects of innovation	Acc to r in o c

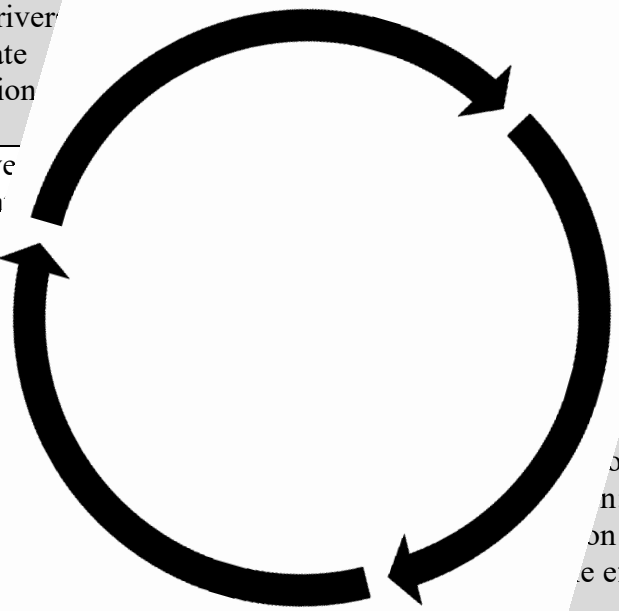

Table 14.4 shows how the discourses are linked to each othe[illegible]ar reasoning whereby the discourses, in combination, uphold the status of innovation as the remedy to organizational decline and destruction. The grey cells summarize the findings from the analysis and the other cells illustrate the linkages between the three discourses. While the discourse of acceleration constructs meanings around drivers of innovation, it also ascribes meaning to practices and effects of innovation. The same can be shown for the discourse of self-preservation and the discourse of faith (see circular 'movement' as symbolized in the table). Thus, the assumptions around drivers of innovation are interconnected with expected

organizational effects. It hence may be argued that the discourse of acceleration is tightly intertwined with the discourse of faith. Moreover, the discourse of faith constructs a complete trust in the goodness of innovation; that is, innovation will guarantee numerous beneficial effects for the organization provided that the organization engages in acceleration and effective self-preservation practices.

14.5 CONCLUSIONS

In this chapter we have shown how discourse analysis is useful for critical studies of innovation. We conducted a discourse analysis of 32 high impact academic management articles that discuss innovation and identified three themes: drivers, practices and effects. These themes are underpinned by the discourses of acceleration, self-preservation and faith, which are entwined and entangled in academic writings.

Discourses are not only words; they construct social reality, such as innovation, and therefore have material effects, positive as well as negative. Our analysis indicates that the studied discourses potentially produce a self-reinforcing circle that maintains the pro-innovation bias. The articles studied are primarily focused on benefits for the innovating organization through acceleration, self-preservation and a faith in the goodness of innovation, rather than problematizing tendencies and effects of innovation and self-reinforcing features. In short, the articles argue that we must accelerate innovation, preserve the organization by not losing control, and keep faith in the good result of innovation. We do not dispute that innovation and the potential self-reinforcing circle have beneficial effects. However, the implication of our analysis is the importance of acknowledging the self-referential features and the potential self-reinforcing circle. Research needs to recognize and explore what innovation leads to beyond the immediate economic interests of organizations (rather than

focusing primarily on what drives innovation). This would also help scholars to identify blind spots, and to invite research which rejects the pro-innovation bias in order to extend research agendas to also include undesirable effects of innovation and possibilities to reduce them. This, we suggest, may have the potential to conceptualize innovation in new, more nuanced ways. Future innovation research and practitioners may thus broaden our understandings of innovation by asking: 'What does innovation drive?', 'What practices enhance pluralism and diverse voices?' and 'What effects are discernible outside the organization?'

To conclude, due to the current strong emphasis on innovation in research and in society at large, its ubiquitous nature and the almost exclusive positive meanings attributed to it, we argue that great potential lies in expanding research and practice to deal more explicitly with the destructive side of innovation. The practical consequences of such an expansion could be considerable due unique position of innovation in the economic system and its powerful capacity to produce change with a wide range of effects and indirect systemic consequences.

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REFERENCES

Ahl, H. (2006), 'Why research on women entrepreneurs needs new directions', *Entrepreneurship Theory and Practice*, **30**(5), 595–621.

Ahl, H. (2007), 'A Foucauldian framework for discourse analysis', in H. Neergaard and J.P. Ulhøi (eds), *Handbook of Qualitative Research Methods in Entrepreneurship*, Cheltenham, UK and Northampton, MA, USA: Edward Elgar, pp. 216–50.

Alsos, G.A., E. Ljunggren and U. Hytti (2013), 'Gender and innovation: state of the art and a research agenda', *International Journal of Gender and Entrepreneurship*, **5**(3), 236–56.

Anderson, N., C.K.W. De Dreu and B.A. Nijstad (2004), 'The routinization of innovation research: a constructively critical review of the state-of-the-science', *Journal of Organizational Behavior*, **25**, 147–73.

Andersson, S., K. Berglund, E. Gunnarsson and E. Sundin (2012), *Promoting Innovation: Policies, Practices and Procedures*, Stockholm: Vinnova.

Brown, L. and S.P. Osborne (2013), 'Risk and innovation: towards a framework for risk governance in public services', *Public Management Review*, **15**(2), 186–208.

Calás, M.B., L. Smircich and K.A. Bourne (2009), 'Extending the boundaries: reframing "entrepreneurship as social change" through feminist perspectives', *Academy of Management Review*, **34**, 552–69.

Fagerberg, J. (2005), 'Innovation. A guide to the literature', in J. Fagerberg, D.C. Mowery and R. Nelson (eds), *The Oxford Handbook of Innovation*, New York: Oxford University Press, pp. 1–26.

Foucault, M. (1971), 'Orders of discourse', *Social Science Information*, **10**(2), 7–30.

Gee, J.P. and M. Handford (2012), 'Introduction', in J.P. Gee and M. Handford (eds), *The Routledge Handbook of Discourse Analysis*, London and New York: Routledge, pp. 1–6.

Godin, B. (2012), 'An old word for a new world, or the de-constestation of a political and contested concept', in K.-E. Sveiby, P. Gripenberg and B. Segercrantz (eds), *Challenging the Innovation Paradigm*, London: Routledge, pp. 37–60.

Kimberly, J.R. (1981), 'Managerial innovation', in P.C. Nystrom and W.H. Starbuck (eds), *Handbook of Organizational Design*, New York: Oxford University Press, pp. 84–104.

Leitch, S., J. Motion, E. Merlot and S. Davenport (2014), 'The fall of research and rise of innovation: changes in New Zealand science policy discourse', *Science and Public Policy*, **41**(1), 119–30.

Mabey, C. (2013), 'Leadership development in organizations: multiple discourses and diverse practice', *International Journal of Management Reviews*, **15***,* 359–80.

OECD (1992), *Oslo Manual*, reprinted in 1997 and 2005, Paris: OECD Publications.

Parker, I. (1992), *Discourse Dynamics*, London: Routledge.

Perren, L. and J. Sapsed (2013), 'Innovation as politics: the rise and reshaping of innovation in UK parliamentary discourse 1960–2005', *Research Policy*, **42**(10), 1815–28.

Phillips, N. and C. Hardy (2002), D*iscourse Analysis. Investigating Processes of Social Construction*, Los Angeles, CA: Sage.

Phillips, N. and C. Oswick (2012), 'Organizational discourse: domains, debates, and directions', *Academy of Management Annals*, **6***,* 435–81.

Sveiby, K.E., P. Gripenberg and B. Segercrantz (eds) (2012), *Challenging the Innovation Paradigm*, London: Routledge.

US Department of Commerce (1967), *Technological Innovation: Its Environment and Management*, Washington, DC: US Government Printing Office.

APPENDIX: ARTICLES INCLUDED IN THE DISCOURSE ANALYSIS

Abrahamson, E. (1991), 'Managerial fads and fashions: the diffusion and rejection of innovations', *Academy of Management Review*, **16**, 586–612.

Agarwal, R. and J. Prasad (1998), 'A conceptual and operational definition of personal innovativeness in the domain of information technology', *Information Systems Research*, **9**, 204–15.

Ahuja, G. (2000), 'Collaboration networks, structural holes, and innovation: a longitudinal study', *Administrative Science Quarterly*, **45**, 425–55.

Amabile, T.M. (1988), 'A model of creativity and innovation in organizations', *Research in Organizational Behavior*, **10**, 123–67.

Bantel, K.A. and S.E. Jackson (1989), 'Top management and innovations in banking: does the composition of the top team make a difference?', *Strategic Management Journal*, **10**, 107–24.

Brown, J.S. and P. Duguid (1991), 'Organizational learning and communities-of-practice: toward a unified view of working, learning, and innovation', *Organization Science*, **2**, 40–57.

Cassiman, B. and R. Veugelers (2006), 'In search of complementarity in innovation strategy: internal R&D and external knowledge acquisition', *Management Science*, **52**(1), 68–82.

Chesbrough, H. (2010), 'Business model innovation: opportunities and barriers', *Long Range Planning*, **43**(2), 354–63.

Cohen, W.M. and D.A. Levinthal (1990), 'Absorptive-capacity: a new perspective on learning and innovation', *Administrative Science Quarterly*, **35**, 128–52.

Damanpour, F. (1991), 'Organizational innovation: a meta-analysis of effects of determinants and moderators', *Academy of Management Journal*, **34**, 555–90.

Dewar, R.D. and J.E. Dutton (1986), 'The adoption of radical and incremental innovations: an empirical analysis', *Management Science*, **32**, 1422–33.

Dougherty, D. (1992), 'Interpretive barriers to successful product innovation in large firms', *Organization Science*, **3**, 179–202.

Eisenberger, R., P. Fasolo and V. Davislamastro (1990), 'Perceived organizational support and employee diligence, commitment, and innovation', *Journal of Applied Psychology*, **75**, 51–9.

Eisenhardt, K.M. and B.N. Tabrizi (1995), 'Accelerating adaptive processes: product innovation in the global computer industry', *Administrative Science Quarterly*, **40**, 84–110.

Etzkowitz, H. and L. Leydesdorff (2000), 'The dynamics of innovation: from national systems and "mode 2" to a triple helix of university-industry-government relations', *Research Policy*, **29**, 109–23.

Hargadon, A. and R.I. Sutton (1997), 'Technology brokering and innovation in a product development firm', *Administrative Science Quarterly*, **42**, 716–49.

Henderson, R.M. and K.B. Clark (1990), 'Architectural innovation: the reconfiguration of existing product technologies and the failure of established firms', *Administrative Science Quarterly*, **35**, 9–30.

Hitt, M.A., R.E. Hoskisson and H. Kim (1997), 'International diversification: effects on innovation and firm performance in product-diversified firms', *Academy of Management Journal*, **40**, 767–98.

Klein, K.J. and J.S. Sorra (1996), 'The challenge of innovation implementation', *Academy of Management Review*, **21**, 1055–80.

Laursen, K. and A. Salter (2006), 'Open for innovation: the role of openness in explaining innovation performance among UK manufacturing firms', *Strategic Management Journal*, **27**, 131–50.

Lee, S.M., D.L. Olson and S. Trimi (2012), 'Co-innovation: convergenomics, collaboration, and co-creation for organizational values', *Management Decision*, **50**(5), 817–31.

Powell, W.W., K.W. Koput and L. SmithDoerr (1996), 'Interorganizational collaboration and the locus of innovation: networks of learning in biotechnology', *Administrative Science Quarterly*, **41**, 116–45.

Scott, S.G. and R.A. Bruce (1994), 'Determinants of innovative behavior: a path model of individual innovation in the workplace', *Academy of Management Journal*, **37**, 580–607.

Stuart, T.E. (2000), 'Interorganizational alliances and the performance of firms: a study of growth and innovation rates in a high-technology industry', *Strategic Management Journal*, **21**, 791–811.

Subramaniam, M. and M.A. Youndt (2005), 'The influence of intellectual capital on the types of innovative capabilities', *Academy of Management Journal*, **48**, 450–63.

Teece, D.J. (1986), 'Profiting from technological innovation: implications for integration, collaboration, licensing and public-policy', *Research Policy*, **15**, 285–305.

Teece, D.J. (2010), 'Business models, business strategy and innovation', *Long Range Planning*, **43**(2), 172–94.

Tsai, W.P. (2001), 'Knowledge transfer in intraorganizational networks: effects of network position and absorptive capacity on business unit innovation and performance', *Academy of Management Journal*, **44**, 996–1004.

Van de Ven, A.H. (1986), 'Central problems in the management of innovation', *Management Science*, **32**, 590–607.

Van de Vrande, V., J.P. De Jong, W. Vanhaverbeke and M. De Rochemont (2009), 'Open innovation in SMEs: trends, motives and management challenges', *Technovation*, **29**(6), 423–37.

von Hippel, E. (1994), '"Sticky information" and the locus of problem solving: implications for innovation', *Management Science*, **40**(4), 429–39.

von Hippel, E. and G. von Krogh (2003), ‘Open source software and the “private-collective” innovation model: issues for organization science’, *Organization Science*, **14**, 209–23.